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Edited by F. R. Moulton and Howard A. Meyerhoff.
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The Building Fund

The Association's campaign for a new home is entering its second phase, but the first is not yet complete. The acquisition of the site on Scott Circle is the first auspicious step in achieving the goal, and when the purchase is consummated, the Association will have not only an ideal location on which to erect a new structure, but also an old building in which its work may temporarily be carried on. Until conditions are right to build, the fund must grow, and its growth should be the concern of every member if the objective is to be attained.

At the moment the Building Fund is more than exhausted, for the Scott Circle properties will cost more than the amount which has thus far been contributed. When the plan to build was announced, a million dollars was set as the approximate goal; and of this total, a scant ten percent has been raised. Fewer than ten percent of the members have participated, but ultimate success will be assured if the remaining ninety percent will give in the same proportion.

The curve of contributions has been an interesting one to watch. A single announcement was sent to every member early in the fall of 1945, and the response was quick. The peak was reached before the close of the year, but despite a gradual decline in the number and in the average amount of contributions, the flow of gifts was maintained until March. Thereafter the steady drop was only momentarily interrupted when announcement was made of the Scott Circle purchase.

In round numbers, the sum of $100,000 has been raised on the strength of a single letter, supplemented by occasional reports in the Bulletin. The officers and staff of the Association will be the first to admit that this is not the accepted method of raising funds. There has been no "drive," no ballyhoo, no high pressure; in fact, there has been little more than an honest statement that the Association can no longer function effectively or efficiently in its present quarters. Membership has increased fifty percent in less than ten years; the editorial staffs of The Scientific Monthly and of Science have been established in Washington; the office of the Advertising Manager has been created. It is these manifestations of normal and healthy growth, as well as the assumption of new responsibilities, that require quarters in keeping with the services to be rendered. Even the unflagging generosity of the Smithsonian Institution, itself cramped for working space, can not encompass the current needs of the Association.

This statement of needs now bears repetition. It is hoped that the building which occupies the Scott Circle site will soon be available for occupancy. Approximately $60,000 more will be required to finance the purchase without encumbering the building project with indebtedness to other rather limited Association resources, which can only temporarily be borrowed for such a purpose. It is the determined aim of the officers to build without financial obligations that might hamper the Association's functions as a free institution devoted solely to the advancement of science.

Scientists will endorse this determination, and it is with confidence that we now ask our members to renew their giving. Just as the prompt and generous response of the first ten percent of our membership made it possible to take the first step in our building program, comparable generosity on the part of the next ten percent will enable the Association to complete this step and start energetically upon the second phase of the project. The program is no longer a dream—there is immediate use and urgent need for the $60,000 which the Building Fund now owes the Association on the purchase of the Scott Circle properties.

UNESCO

Fourteen nations have now endorsed UNESCO, and although the United States is not one of them, there is every reason to believe that affirmative action will be taken before the 79th Congress adjourns. In the hope that the UNESCO Constitution will receive endorsement from this Government and from the minimum number of other governments necessary to put it into operation, the Department of State has proceeded with plans for participation in the meeting of the Preparatory Commission, which was scheduled for July 5; and in the first meeting of the General Conference, which is set for November in Paris.

To assist the Department of State in connection with the work of the Preparatory Commission, an informal advisory committee of scientists has been at work for nearly three months. Detlev Bronk has served as chairman, and among those who have taken some part in its work are Charles E. Kellogg, Howard A. Meyerhoff, W. Albert Noyes, Jr., Stewart E. Reimal, Harlow Shapley, Merle Tuve, and Raymond L. Zwemer. Rollin Atwood is Executive Secretary of the group. The deliberations and decisions of the committee have been coordinated with the other functions of UNESCO by Charles A. Thomson of the Office of International Information and Cultural Affairs, Department of State.

The science advisers have found more problems than they have solved. Since UNESCO does not in fact exist, its organization, administration, and financial structure and resources are problematical. Under these conditions planning is difficult and must be flexible. None the less the committee has set for itself two major tasks, one of which is essentially complete: It has endeavored to formulate scientific projects with which UNESCO may profitably deal, and it has submitted a list of suggestions to be considered by the Preparatory Commission for the agenda of the Paris meeting next November. It will also attempt to evolve machinery through which American scientists may take a direct and active part in the scientific work of UNESCO, for the latter, to be successful, must command the interest and confidence of every professional group and, ideally, of every individual scientist.

The suggestions regarding a scientific program for UNESCO were transmitted by W. Albert Noyes, Jr., who, as the committee's representative, attended a meeting of the Subcommittee on Science of UNESCO's Preparatory Commission in London on May 31 and June 1. Dr. Noyes reports that there was a strong desire on the part of the nations represented to make UNESCO a successful organization and "to give it a program which will capture the imagination as being worthwhile for the long-range future." At the London meeting projects were discussed at length, and those to which highest priority has been given are well worth listing because of their significance and immediacy:

(1) Facilitate the exchange of personnel, of apparatus, and of information particularly by providing foreign exchange, arranging for diplomatic passports or visas when feasible, and by providing information on locations of scientific centers, etc.

(2) Facilitate the transfer of funds when such transfer is essential to international cooperation in science.

(3) Cooperate with existing international organizations, particularly international scientific unions.

(4) Aid wherever possible the furnishing of apparatus and of personnel to needy countries, and particularly to start a survey of such needs.

(5) Provide scholarships, fellowships, and other financial aid for exchanges of personnel of various types among the cooperating countries.

Clearly UNESCO is setting for itself a program of rehabilitation and cooperation which will restore and extend the interrupted flow of scientific research. Not only does it face the task of resuscitating scientific endeavor in nations that must rebuild from their very foundations, but also of persuading national groups to coordinate their efforts toward common ends. It pledges cooperation with existing agencies, notably the international scientific unions, and it thus establishes itself as a coordinating and supplemental agency rather than as a competing entity. Not the least of its problems is that of coordinating its activities with the programs of other United Nations Organizations, notably those dealing with agriculture and with public health, both of which deal not alone with applied science, but with fundamental aspects of biology and chemistry, as well.

To achieve unity in any segment of the United Nations Organizations is no small undertaking; and to seek cooperation and accord in any field among the nations of the world is—if understatement is permissible—an ambitious goal. Perhaps scientists can step in where statesmen fear to tread, for if accord can not be achieved in the quest for truth, there is little point in seeking it elsewhere.—H.A.M.

Science Exhibits at the Boston Meeting

For twenty years science exhibits have been features of annual meetings of the Association. While most of them have been commercial, there have always been exhibits by scientists. At Boston the purely scientific exhibits will be greatly stressed.

In order to pass on proposed science exhibits and to provide all necessary facilities for presenting them, the local General Committee for the Boston meeting next December 26–31 has appointed a subcommittee on science exhibits, consisting of one representative from each of the eight principal educational institutions in the Boston area.

The director of the science exhibition has announced that the Association will provide exhibit space without charge for all science exhibits approved by the local committee. Each exhibit booth, ten feet wide and six feet deep, will be provided with shelves, two chairs and name signs, and will be given general illumination, necessary electrical outlets, and general service. Special requirements can be obtained from the company providing the booths and decorations. The exhibitors will pay only for transportation, installation and special requirements.

Scientists interested in presenting exhibits of their scientific processes and work at the Boston meeting of the Association next December should write promptly to Mr. Theo. J. Christensen, Director of the Science exhibition, A.A.A.S., Massachusetts and Nebraska Avenues, Washington 16, D.C., for application forms. The closing date for applications is September 15, 1946, following which the local committee will pass on the applications.

The National Academy of Sciences in War

The National Academy of Sciences was established in 1863 by an Act of Congress, during the Civil War. The National Research Council was established by the Academy in 1918 as a permanent agency under authority of an Executive Order issued by President Wilson. Both were due to the pressures of war. Now Doctor Frank B. Jewett, president of the Academy, reports on the contributions scientists have made to the war effort of the United States through the Academy and the Research Council. Under the charter of the Academy all services to the Government by or through the Academy are without compensation, but the Academy is reimbursed for actual expenses incurred in performing services requested by a Department of the Government.

One group of contracts was with the Civil Aeronautics Administration and covered the selection, training, and testing of aircraft pilots. An expenditure of $781,504 was authorized for this work.

Contracts with Navy Department amounted to $19,800, and those with the War Department $1,513,150. The contracts with the War Department covered a wide range of scientific problems, including rocket and jet propulsion applications, biological warfare, protection against bombs, wind tunnels for aviation experiments, and mine field clearance.

The contracts for investigations on military medicine and on food, nutrition and food habits authorized the expenditure of $261,650.

Contracts for the Office of Scientific Research and Development totaled $1,929,406, of which $972,206 was for military medicine and $509,500 for metallurgical problems. Contracts with the War Production Board amounted to $337,500.

In addition to the contracts listed above, there were several others giving a grand total of authorized expenditures for war purposes of more than $4,800,000. These great sums were administered efficiently and the results of the expenditures added greatly to the prosecution of the war. The story of the investigations of scientists will be one of the brightest chapters in the history of the war. Many of their researches, particularly those in medicine and nutrition, will be more valuable in the many years of the future than they were in the few war years.

The Light Over Bikini

On Sunday afternoon, June 30, a towering cloud of light appeared over Bikini, far away in the western Pacific Ocean. It was a great light, but it represented by no means the greatest amount of energy that has ever tormented the surface of the earth. For example, when Krakatoa erupted, in 1883, it produced a tidal wave that was destructive for hundreds of miles, and the dust it blew into the high upper air drifted several times around the earth in perceptible amounts and tinted the skies for months. The earthquake waves it produced swept repeatedly through and around the earth before their energy was attenuated beyond the reach of recording instruments.

Concentrated energy sometimes comes to the earth in destructive quantities from interplanetary space. Not many years ago a huge swarm of meteorites crashed onto the surface of the earth in an uninhabited region in northern Si-

beria. It struck the earth with a velocity exceeding ten miles a second and gave up most of its kinetic energy within one two-thousandth of a second. There has been no determination or close estimate of its mass, but the sound of its impact was heard for a thousand miles and the blast from the heat generated at its impact flattened the forests outward all around the area where it fell.

In earlier days, probably 20,000 or more years ago, a much greater meteoric mass fell at an easily accessible place near Winslow, Arizona. It punched a hole in solid rock about three quarters of a mile in diameter and still about 700 feet deep. Something like 80,000,000 tons of rock were not only shattered by the impact of the meteor, but the very crystals of much of the materials were pulverized into very fine dust. Numerous fragments of the meteor, cushioned down to the earth's surface by the air, have been found around the crater; the kinetic energy of the main mass of the meteor, perhaps as much as 100,000 tons moving at the rate of 20 miles per second, was so great and was transformed into heat so rapidly that the meteoric iron itself was destroyed, somewhat as the steel tower vanished when the first atomic bomb was exploded in New Mexico.

Even the energy of great meteors striking the earth is trivial in comparison with that of storms on the sun in which flaming masses of matter much larger in volume than the earth shoot up from its surface farther than from the earth to the moon. It is almost certain that these vast eruptions are due to releases of atomic energy. The sun, however, is a relatively quiet star. Occasionally other stars, so far away in the immensities of space that centuries are required for their light to come to the solar system, explode with a violence and sudden release of energy that causes their radiations to increase a hundred thousand fold in a few hours. In comparison with these exploding stars the atomic bombs are only children's toys.

To dwell on the violence of atomic bombs or exploding stars is to miss the real significance of these recent scientific discoveries. Whether or not they will enable human beings to go faster or ascend higher or destroy more of their fellow men matters little in comparison with the assurance that such achievements give human minds that there is a fundamental orderliness in the universe which can be discovered and understood. The awe-inspiring nature of such phenomena as those due to the atomic bomb and storms on the sun or explosions in stars arrests the attention and directs thoughtful minds to deeper questions than the passing problems of the day.

According to messages from Bikini, as reported in the daily press, the atomic bomb was disappointing because it did not make a greater spectacle in the sky, destroy all the ships anchored in the lagoon, and blast away the enclosing atolls. If a demonstration of great forces is what was desired, a telescope and appropriate spectroscopic attachments might have been taken along to make discernible the storms raging on the sun. But the point was not primarily the violence of the atomic bomb and its possible uses in war. It was, rather, the demonstration that, by small-scale experiments on the earth, scientists have confirmed what astronomers had inferred from their observations of storms on the sun and explosions of other stars. And from this it follows that there is a remarkable agreement between the logical processes of the mind, as used in scientific investigations, and the fundamental properties of the physical universe. It is conceivable that the mind of man, in its long evolution, has come to be in harmony with its environment by the harsh exactions of the survival of the fittest or by some other biological principle. But even though there be a fundamental harmony between the properties of the mind and of the inanimate universe about us, it is not easy to explain Einstein's pure deduction of the equivalence of mass and energy, which was an essential link in the development of the atomic bomb, as well as in the theory of the continuing radiation of the sun and stars.

Meeting of the French Association in September

In spite of the great disorganization in France during the war, within three months after its close, in September 20–26, 1945, the *Association Française pour l'Advancement des Sciences* held a meeting in Paris. Our first meeting after the war was held in St. Louis in March, 1946.

The French Association will hold its next meeting in Nice from the ninth to the fourteenth of September. Dr. Jean Verne, secretary of the French Association, has asked us to accredit delegates to this meeting. Since it is highly desirable that we restore and greatly extend the relations between American and French scientists, it is hoped that members of the Association who will be in France at that time will attend the meeting of the French Association as delegates from our Association.

The Proceedings

Record cards have been sent to every member of the Association for the purpose of securing information which will be used in the new edition of Proceedings. The response has been prompt, and notwithstanding the season of the year, it is hoped that it will approach perfection. Although summer is not the best time of year to reach people, it is the time when a task of this magnitude can best be undertaken by the Association staff. Dues have been paid; institutions are closed or are operating on limited summer session schedules; societies have suspended meetings till fall. And with these seasonal modifications in scientific activity, the regular services which the Association performs ebb to the point where new undertakings can be started.

Preparation of the Proceedings is more than a summer job, and more than a staff job. It calls for the cooperation of every member and of every affiliated society. For one of the volume's principal functions is to provide a directory of members and of societies. And no directory is worth publishing unless it achieves almost perfect accuracy. As each biographical item passes successively through the hands of the secretarial, the editorial staff, and finally the printer, the chances of error multiply, but errors made in this tedious process are the responsibility of the Washington office. And the ability of this office to achieve perfection depends entirely upon the accuracy with which the cards are filled out by each member. The efficiency with which the directory can be compiled depends upon the promptness of members in returning them.

As might be expected, most cards are correctly filled out, but a compendium of "boners" could be compiled from some of the returns, and already requests for corrections are coming in. There have been some surprises. With several hundred changes of address being registered every month, it was not expected that the request for directory information would turn up more. But the fact is that many hundreds of members are reporting for the first time changes of address that were made months ago, and an unexpectedly heavy burden has been thrown upon the staff in recording the changes and in notifying the journals.

Promptness will greatly speed the work and will save the labor and money involved in sending out second calls. It is the aim of the Association to make its directory of members complete. Completeness, accuracy, and speed are companion qualities. If cards are not returned at all, completeness, or accuracy, or both may be sacrificed, for if a name is included without reference to a record card, the Association staff can do no better than guess about some of the biographical data. If cards are returned late, it retards progress until the information is obtained, and it delays the publication date of the Proceedings.

No doubt, the purpose of this item is clear by this time: It is to urge that those members who, through any mischance, failed to receive record blanks for the directory, notify the Association office at once; that those who have mislaid the blanks will send for new ones without delay and without embarrassment; that those who have not returned them by the time this issue of the *Bulletin* reaches them will sit down at once to the simple task of filling them out and mailing them in; and that those who have done their duty will settle down self-righteously to the enjoyment of their summer vacations and patiently to the anticipation of the volume's appearance. It is impossible to predict the date on which the Proceedings will appear, but it is hoped that the work can proceed without serious slackening of pace, and that the entire task can be concluded early in 1947. As planned, the volume should serve as an indispensable reference for anyone who wants the facts about scientists and scientific organizations in this country.

Thanks for Copies of Association Journals

In the June issue of the *Bulletin* a request was made for back numbers of *Science* and the *Scientific Monthly*. The response was prompt and generous, with the result that there is now a shortage of only two issues of *The Scientific Monthly*, those of April 1945 and March 1946.

Demands for back numbers of *Science* have exhausted the stocks of the issues of March 8, 15, 22, 29, April 5 and 12. Copies of these issues of *Science* and the *Monthly* will be greatly appreciated, and postage (parcel post) will be refunded.

Science in Politics

Scientific research has been an integral part of government for more than a century, and it is safe to say that the Federal Government is the largest single employer of scientists in the world. But the men who are carrying on pure and applied research in federal bureaus and surveys are carefully insulated from political activity and, indeed, many of them have inadvertently become politically sterilized by establishing their

legal residence in Washington, where residents have no vote. Even the administrative heads of these bureaus and surveys remain aloof from the political scene, for their appropriations, their policies, and their programs must filter through political buffers—the department heads. Government science and government scientist may feel the impact of politics, but they wield no political power.

Historically, however, science has been in politics since 1863, and it was placed there by politicians. On March 3 of that year Abraham Lincoln signed an Act of Congress creating the National Academy of Sciences. Although established to advise the Government on scientific matters whenever called upon to do so, the Academy has more than a scientific function. Senator Henry Wilson, who introduced the bill, "wanted the men of Europe, who profess to see in America the failure of republican institutions, to realize that the people of the United States . . . are cherishing the institutions that elevate man and ennoble nations." In his mind the National Academy of Sciences was not only a front to confound the men of Europe but "another element of power to keep in their orbits, around the great central sun of the Union, this constellation of sovereign commonwealths." By any definition of terms the motives in creating the Academy were in part political.

There is no need to cringe or shudder at this element in the parentage of the National Academy of Sciences. On the contrary, it seems probable that Henry Wilson, of Massachusetts, has never received the credit due him for recognizing the broader values of science. True, he was not scientist enough to appreciate the direct impact of science upon social forces, but he knew that science had functions which transcended the isolation of species and of chemical elements.

Now the politicians are newly aware of science. Few of them see it as a whole, for to some it is merely the fearsome creator of the atomic bomb and must be controlled; to others it is the handmaiden of invention and production, furnishing gadgets, comforts, or technical devices which beget technological unemployment; to others it is the salvation of mankind through medicine, or pest control, or improved farm production. Only a few can penetrate its many glittering facets and view it as a most potent force in shaping modern civilization.

Even so, it is these few politicians who, like Henry Wilson, are doing more to make science a political factor than are the scientists, some of whom resent the intrusion of political strangers in their pure and undefiled laboratories. There are sound reasons for suspicion, but none for resentment. Political ways and political language traditionally have little in common with the vigorous method and precise, if strange, language of science. It must be evident, on the other hand, that politicians have not underestimated the potential role of science, and that the role can be played under the aegis of sound legislation, or well considered departmental policies. And on this legislation and on these policies science and politics must meet. How they can meet is an important question.

Whether it be the functioning of UNESCO, or the Atomic Energy Commission, or the National Science Foundation, the operation must be solidly based in fact, and it must achieve a desired result. There is no group of politicians in the world who knows the scientific facts about atomic energy, or about scientific projects for UNESCO, or a National Science Foundation. But there is not a single scientist or scientific organization that can create an authentic or official commission or foundation. In these circumstances the least scientists must do is to supply their representatives with the pertinent facts, and may it be said that the members of Congress and of government departments not merely welcome but seek factual material—and usually in a way that should satisfy the most exacting scientist. They do not ask for selected facts, but rather for the entire background. It is important, therefore, that the facts be gathered from impartial and objective sources, and that more than one source of information be used. Unfortunately these simple rules are not always followed, nor are politicians always able to discriminate between objectively impartial groups and partisan pressure groups.

During the past year the Association has been consulted by government departments and boards and by committees and subcommittees of Congress to an increasing extent. Its unique position is receiving recognition, for it is the largest and most inclusive general scientific organization in the country, and its location in Washington is convenient, not to say strategic. Not only does it have 28,600 individual members, but it can also call upon its 197 affiliated and associated societies, whose memberships include virtually every qualified scientist in the United States. These, however, are merely statistics, and they do not authorize the Association to speak for American scientists. They do mean, on the other hand, that the Association can—and

does—channel every question to the proper sources for specific information, and when a general reaction is necessary, it can quickly canvass the members of the Council.

The political inquiries which come to the Association are not limited to requests for facts. Just as often there is a request for such judgments and opinions as seem warranted by the facts. Usually the circumstances prompting these requests are of such a nature as to make delay or refusal to comply impossible or unwise. Indeed, the Washington office has come to realize that, as an organization, the Association can fulfill its obligations to its members and its associated societies only by meeting the many demands upon its personnel and machinery from political sources, and to this end it is anxious to perfect its contacts both with its membership and with its affiliates. This objective must be achieved through the Council, which is at once representative of members and societies, and which is the governing body of the Association.

The Council is large but not unwieldy. In a recent request for instructions, its 258 members were canvassed by mail, and 233 replies were received within two weeks, and 244 members ultimately responded. On many questions the returns are not so large, but they never leave the Washington staff in doubt as to the wishes of its members and of its affiliated societies, assuming that the Councilors they elect or appoint are truly representative.

It is to the Council that the Washington office must and will appeal for instructions and guidance on the increasing number of political questions that vitally affect science and scientists. It is not the function of the Association to crusade, nor its prerogative to lobby. But it cannot dodge the responsibility it owes to scientists to furnish information, to express opinions, and, with the sanction of the Council, to take such stands on issues affecting science as the facts dictate. Science is in politics, and it is the solemn duty of scientists through their own professional organizations and through the Association to keep science from being run politically by pressure groups that want their partisan way. Many have voiced fears of the politicians, but there is even greater danger from willful minorities within the scientific fold. There is no law against the application of critical and dispassionate scientific judgment on matters of public policy and legislation, and it is reasonable to conclude that the aggregate judgment of the Council will have these qualities.—H. A. M.

The American Association of Economic Entomologists

The study of insects, at first an avocation, began to assume the status of a profession after the Civil War when the depredations of migratory grasshoppers and other insects threatened the agricultural expansion of the country. Entomologists began to be employed by the United States and Canadian departments of agriculture and by the new state experiment stations to study insect pests and devise means for their control. By 1889 a few men were well established in the new profession of economic entomology. In that year C. V. Riley, of Washington, suggested the organization of an association of economic entomologists. During his absence that summer his assistant, L. O. Howard, and the Dominion Entomologist, James Fletcher, drafted a constitution for the proposed association. Fletcher, as president of the Entomological Club of the A.A.A.S., then isued a call for organization. At the A.A.A.S. meetings in Toronto in August 1889 the Association of Official Economic Entomologists was founded by nine entomologists, three of them Canadians. Thirteen other entomologists were added as charter members. Soon "Official" was dropped from the name, and in 1909 "American" was added. The Association was incorporated in 1913 in the District of Columbia. Of the 22 charter members two of the most distinguished, Dr. L. O. Howard and Dr. Herbert Osborn, still survive at the ages of 89 and 90, respectively. During 57 years they have seen the Association grow to a membership of 1,824.

In most scientific pursuits Germany established societies and publications before similar moves were made in America. In economic entomology, however, America took and kept world leadership. The A.A.E.E. was the world's first and only organization of economic entomologists until Germany's *Verein für angewandte Entomologie* was founded in 1913. Also, the A.A.E.E. was the first national society devoted to entomology. American entomologists of the so-called "pure" variety did not organize the Entomological Society of America until 1906 (see A.A.A.S. Bulletin, June 1943). Since then the two entomological societies have usually held their annual meetings at the same time and place and until 1941 they always met with the A.A.A.S. On matters of interest to all entomologists they have cooperated closely through joint committees. Most professional entomologists are now members of both societies.

Until 1908 the proceedings of the annual meetings of the A.A.E.E. were published either in *Insect Life* or in bulletins of the entomological service of the U. S. Department of Agriculture. In that year the Association established its own official organ, the *Journal of Economic Entomology*, now in its thirty-ninth volume. From the beginning it has appeared bimonthly but it has grown in size and scope from a small journal of proceedings of meetings to a periodical of about 1,000 pages a year, packed with the latest developments in economic entomology. It is distributed to about 3,000 subscribers throughout the world. In

addition to the *Journal* the Association has published from time to time the *Index of American Economic Entomology*. Six volumes have so far appeared, classifying and listing references to the American literature from 1905 to 1939. The A.A.E.E. also collaborated with the A.A.A.S. in publishing the latter's symposium volume *Laboratory Procedures in Studies of the Chemical Control of Insects.*

With the growth of economic entomology it became necessary to establish subsidiary organizations within the parent Association. Because national meetings could not often be held on the West Coast, the Pacific Slope Branch was established in 1916. Then followed the Cotton States Branch, the Eastern Branch, and the North Central States Branch. The Branches are strong organizations, holding their own annual meetings and largely financing their own activities. The Eastern Branch has performed a great service for economic entomology by publishing *Entoma*, a directory of insect and plant pest control. This directory, now in its sixth edition of 320 pages, lists suppliers of materials and equipment used in pest control and contains additional information of great value to producers and consumers of such products. The Eastern Branch also took the initiative in establishing in 1938 the first annual award and medal "for notable contribution to the science of economic entomology."

To deal with special aspects of economic entomology the Association now has five Sections, which usually meet with the parent Association. They are concerned with Plant Pest Control and Quarantine, Apiculture, Extension, Teaching, and Insecticides. Chairmen of Branches and Sections are regarded as vice-presidents of the Association.

The present simple constitution of the Association, adopted in 1937, gives its objectives as follows: "to promote the study and to advance the science of entomology; to publish the *Journal of Economic Entomology* and other entomological publications." As to membership: "The classes of membership shall be Active and Honorary," which means practically that there is only one class of membership instead of three (active, associate, and foreign) previously authorized. Dues, including subscription to the *Journal*, are now $5 a year.

In addition to maintaining a current operating balance, the Association has a permanent fund, which has been built up since 1922. Acting first among societies affiliated with the A.A.A.S., the Association this year appropriated $2,000 from its permanent fund for the building fund of the A.A.A.S., thus strengthening the ties between the two organizations, which have existed since the Toronto meeting of 1889. The A.A.E.E. is now the largest society affiliated with Section F.

Some of the present interests of the A.A.E.E. are reflected in the titles of its standing committees; for example, Common Names of Insects, Insecticide Terminology, Popular Entomological Education, Cooperation with Pest Control Operators, Relation of Entomology to Conservation, Grasshopper Research, and Codling Moth.—F. L. Campbell.

Membership in the Association

Eligibility for Membership

Membership in the Association is open to all persons engaged in scientific work, whether in the fields of the natural or the social sciences; to all amateur scientists, whatever their special interests; and to all who desire to follow the advances of science and its effects upon civilization. Members having made substantial contributions to the advancement of science are eligible for election as fellows.

Dues and Publications

Membership dues are $5 per year, including subscriptions for the monthly A.A.A.S. Bulletin and either the weekly journal *Science*, now in its 104th volume, or *The Scientific Monthly*, now in its 63rd volume. *Science* is a journal for professional scientists; the *Monthly* is a nontechnical journal for the intelligent public. The Association also publishes technical symposia and nontechnical books on science that are available for members at prices substantially below those to the public.

Organization and Meetings

The Association was founded in 1848, with an initial membership of 461. Papers in its early programs were classified as either natural philosophy or natural history. Now its work is organized under 16 sections and 195 associated societies having a total membership of over 500,000. Its annual meetings are the greatest regular gatherings of scientists in the world.

Nominations and Applications for Membership

Members may submit nominations for membership at any time, and persons desiring to become members can obtain membership application forms from the Office of the Permanent Secretary, the Smithsonian Institution Building, Washington 25, D. C.

Changes of Address

New addresses for the Association's record and for mailing the journals *Science* and *The Scientific Monthly*, as well as the A.A.A.S. Bulletin, should be in the Office of the Permanent Secretary, Washington 25, D. C., at least two weeks in advance of the date when the change is to become effective.

Officers of the Association

President, James B. Conant; *Administrative Secretary*, F. R. Moulton; *General Secretary*, Otis W. Caldwell; *Treasurer*, W. E. Wrather.

Executive Committee: Charles F. Kettering, *Chairman;* Otis W. Caldwell, Anton J. Carlson, Arthur H. Compton, James B. Conant, Burton E. Livingston, Kirtley F. Mather, Walter R. Miles, F. R. Moulton, Fernandus Payne, and Elvin C. Stakman.